

CAPACITY MANAGEMENT TOOLS RELEASE NOTES & INSTALLATION GUIDE

Version 2.0

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Department of Veterans Affairs
VistA Health Systems Design & Development (HSD&D)
Development and Infrastructure Support (DaIS)

Revision History

Documentation Revisions

The following table displays the revision history for this document. Revisions to the documentation are based on patches and new versions released to the field.

Date	Revision	Description	Author	
03/23/04	1.0	Initial Capacity Management Tools V. 2.0 software documentation creation.	Robert Kamarowski, Bay Pines, FL Office of Information Field Office (OIFO) and Thom Blom, Oakland, CA OIFO	
04/15/04	1.1	Corrected references to CPRS and OE/RR software versions with regard to Patch OR*3.0*209 in Chapter 2, "Preliminary Consideration."	Robert Kamarowski, Bay Pines, FL Office of Information Field Office (OIFO) and Thom Blom, Oakland, CA OIFO	
12/20/04	1.2	Reviewed document and edited for the "Data Scrubbing" and the "PDF 508 Compliance" projects.	Thom Blom, Oakland, CA OIFO	
		Data Scrubbing—Changed all patient/user TEST data to conform to HSD&D standards and conventions as indicated below:		
		The first three digits (prefix) of any Social Security Numbers (SSN) start with "000" or "666."		
		Patient or user names are formatted as follows: MMPDPATIENT,[N] or KMPDUSER,[N] respectively, where the N is a number written out and incremented with each new entry (e.g., KMPDPATIENT, ONE, KMPDPATIENT, TWO, etc.).		
		Other personal demographic- related data (e.g., addresses, phones, IP addresses, etc.) were also changed to be generic.		
		PDF 508 Compliance—The final PDF document was recreated and now supports the minimum requirements to be 508 compliant (i.e., accessibility tags, language selection, alternate text for all images/icons, fully functional Web links, successfully passed Adobe Acrobat Quick Check).		

Management Tools Patch XMPD*2.0*3.	05/12/0	5 1.3	Updated Release Notes section and any references to the CP Environment Check [KMPD STATUS] option based on changes introduced with Capacity Management Tools Patch XMPD*2 0*3	Robert Kamarowski, Bay Pines, FL OIFO and Thom Blom, Oakland, CA OIFO
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Table i: Documentation revision history

Patch Revisions

There are no patches for this initial release of the Capacity Management Tools Version 2.0 software. In the future, for a complete list of patches related to this software, please refer to the Patch Module on FORUM.

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Figures and Tables

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- DaIS Program Director—Catherine Pfeil
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- Technical Writer—Thom Blom

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- CAVHCS—Thomas E. Ash
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- Loma Linda, CA—Diane Newland
- Reno, NV—Kathy Smith
- West Haven, CT

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Orientation

How to Use this Manual

Throughout this manual, advice and instructions are offered regarding the use of Capacity Management Tools software and the functionality it provides for Veterans Health Information Systems and Technology Architecture (VistA) software products.

This manual uses several methods to highlight different aspects of the material:

• Various symbols are used throughout the documentation to alert the reader to special information. The following table gives a description of each of these symbols:

Symbol	Description
1	Used to inform the reader of general information including references to additional reading material.
A	Used to caution the reader to take special notice of critical information.
*	Used to denote special installation instructions only (e.g. platform-specific steps).

Table ii: Documentation symbol descriptions

- Descriptive text is presented in a proportional font (as represented by this font).
- HL7 messages, "snapshots" of computer online displays (i.e., roll-and-scroll screen captures/dialogues) and computer source code, if any, are shown in a *non*-proportional font and enclosed within a box.
 - ➤ User's responses to online prompts will be boldface type.
 - The "**Enter**>" found within these snapshots indicate that the user should press the Enter key on their keyboard. Other special keys are represented within <> angle brackets. For example, pressing the PF1 key can be represented as pressing **PF1>**.
 - Author's comments, if any, are displayed in italics or as "callout" boxes.
 - Callout boxes refer to labels or descriptions usually enclosed within a box, which point to specific areas of a displayed image.
- All uppercase is reserved for the representation of M code, variable names, or the formal name of options, field and file names, and security keys (e.g., the XUPROGMODE key).

How to Obtain Technical Information Online

Exported file, routine, and global documentation can be generated through the use of Kernel, MailMan, and VA FileMan utilities.



Methods of obtaining specific technical information online will be indicated where applicable under the appropriate topic. Please refer to the *Capacity Management Tools Technical Manual* for further information.

Help at Prompts

VistA software provides online help and commonly used system default prompts. Users are encouraged to enter question marks at any response prompt. At the end of the help display, you are immediately returned to the point from which you started. This is an easy way to learn about any aspect of VistA software.

To retrieve online documentation in the form of Help in any VistA character-based product:

- Enter a single question mark ("?") at a field/prompt to obtain a brief description. If a field is a pointer, entering one question mark ("?") displays the HELP PROMPT field contents and a list of choices, if the list is short. If the list is long, the user will be asked if the entire list should be displayed. A YES response will invoke the display. The display can be given a starting point by prefacing the starting point with an up-arrow ("^") as a response. For example, ^M would start an alphabetic listing at the letter M instead of the letter A while ^127 would start any listing at the 127th entry.
- Enter two question marks ("??") at a field/prompt for a more detailed description. Also, if a field is a pointer, entering two question marks displays the HELP PROMPT field contents and the list of choices.
- Enter three question marks ("???") at a field/prompt to invoke any additional Help text stored in Help Frames.

Obtaining Data Dictionary Listings

Technical information about files and the fields in files is stored in data dictionaries. You can use the List File Attributes option on the Data Dictionary Utilities submenu in VA FileMan to print formatted data dictionaries.



For details about obtaining data dictionaries and about the formats available, please refer to the "List File Attributes" chapter in the "File Management" section of the *VA FileMan Advanced User Manual*.

Assumptions About the Reader

This manual is written with the assumption that the reader is familiar with the following:

- VistA computing environment
 - ➤ Kernel—VistA M Server software
 - > VA FileMan data structures and terminology—VistA M Server software
- Microsoft Windows
- M programming language

This manual provides an overall explanation of configuring the Capacity Management Tools interface and the changes contained in Capacity Management Tools Version 2.0. However, no attempt is made to explain how the overall VistA programming system is integrated and maintained. Such methods and procedures are documented elsewhere. We suggest you look at the various VA home pages on the World Wide Web (WWW) for a general orientation to VistA. For example, go to the Veterans Health Administration (VHA) Office of Information (OI) Health Systems Design & Development (HSD&D) Home Page at the following Web address:

http://vista.med.va.gov/

Reference Materials

Readers who wish to learn more about the Capacity Management Tools software should consult the following:

- Capacity Management Tools User Manual
- Capacity Management Tools Technical Manual
- The Capacity Planning (CP) Services' Home Page at the following Web address:

http://vista.med.va.gov/capman/default.htm

This site contains additional information and documentation.

VistA documentation is made available online in Microsoft Word format and Adobe Acrobat Portable Document Format (PDF). The PDF documents *must* be read using the Adobe Acrobat Reader (i.e., ACROREAD.EXE), which is freely distributed by Adobe Systems Incorporated at the following Web address:

http://www.adobe.com/



For more information on the use of the Adobe Acrobat Reader, please refer to the *Adobe Acrobat Quick Guide* at the following Web address:

http://vista.med.va.gov/iss/acrobat/index.asp

VistA documentation can be downloaded from the Health Systems Design and Development (HSD&D) VistA Documentation Library (VDL) Web site:

http://www.va.gov/vdl/

VistA documentation and software can also be downloaded from the Enterprise VistA Support (EVS) anonymous directories:

Albany OIFO ftp.fo-albany.med.va.gov
 Hines OIFO ftp.fo-hines.med.va.gov
 Salt Lake City OIFO ftp.fo-slc.med.va.gov

Preferred Method download.vista.med.va.gov

This method transmits the files from the first available FTP server.



DISCLAIMER: The appearance of any external hyperlink references in this manual does not constitute endorsement by the Department of Veterans Affairs (VA) of this Web site or the information, products, or services contained therein. The VA does not exercise any editorial control over the information you may find at these locations. Such links are provided and are consistent with the stated purpose of this VA Intranet Service.

1. Release Notes

The Veterans Health Information Systems and Technology Architecture (VistA) Capacity Planning Tools Version 2.0 software is now available. This enhanced software has the following features:

- **Increased Data Transmission**—Timing data is now automatically transmitted daily and weekly to the Capacity Planning National Database.
- Improved Data Display—Timing data will now be displayed graphically on the Capacity Planning Statistics Web Page:

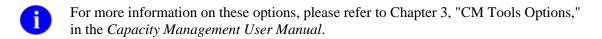
http://vista.med.va.gov/capman/Statistics/Default.htm

- **Expanded Option**—As of Patch KMPD*2.0*3, the existing Check CM Tools Environment option [KMPD STATUS] has been renamed to CP Environment Check and its functionality was enhanced and expanded.
 - For more information on this option, please refer to Chapter 3, "CM Tools Options," in the *Capacity Management Tools User Manual*.

• Options Added:

- ➤ Edit CP Parameters File option [KMPD PARAM EDIT]—This option allows editing of the Capacity Planning (CP) parameters in the newly added CP PARAMETERS file (#8973).
- ➤ Timing Monitor option [KMPD TMG MONITOR]—This option can be left running on a terminal. It updates itself and displays the number of seconds it takes a Computerized Patient record System (CPRS) coversheet to load. It displays data for each hour of the day and each new hour as it comes up. It updates itself according to the entry in the MONITOR UPDATE RATE MINUTES field (#19.01) in the CP PARAMETERS file (#8973). If there is no entry in Field #19.01, the default is every 10 minutes.

It also displays an Alert Message on the screen if the number of seconds to load a CPRS coversheet exceeds the value of the MONITOR ALERT - SECONDS field (#19.02) in the CP PARAMETERS file (#8973). If there is no entry in Field #19.02, the default is 30 seconds. Both of these parameters can be edited using the Edit CP Parameters File option [KMPD PARAM EDIT].



• Files Added:

- ➤ CP CODE EVALUATOR file (#8972.1)—This file was added for the future implementation of the Code Evaluator, which will allow programmers to test the efficiency of M code changes.
- ➤ CP PARAMETERS file (#8973)—This file was created to contain the parameters and data for the following:
 - 1. Current versions/patches of Capacity Planning applications: Resource Usage Monitor (RUM), Statistical Analysis of Global Growth (SAGG), and Capacity Management (CM) Tools.
 - 2. Start, stop, and delta times for all daily/weekly background jobs.
 - 3. The number of weeks to keep data: RUM, HL7, and Timing.
 - 4. Current facility CPU data:
 - Node
 - Type of CPU
 - Number of processors
 - Processor speed
 - Amount of memory
- For more information on these files, please refer to Chapter 3, "Files," in the *Capacity Management Technical Manual*.

2. Preliminary Consideration

Purpose

The purpose of this guide is to provide instructions for installing the Veterans Health Information Systems and Technology Architecture (VistA) Capacity Planning (CP) Services' Capacity Management Tools software, Version 2.0.

About the Installation Procedures

Separate installation procedures are provided in this guide based on the installation type:

- Version 2.0 Installation—Previous version of software installed.
- Version 2.0 Virgin Installation—Software never installed.

We recommend sites take the following approach to installing the CM Tools software:

- 1. Obtain the CM Tools V. 2.0 documentation.
 - For more information on the CM Tools documentation, please refer to the "Reference Materials" topic in the "Orientation" section in this manual.
- 2. Install the server software in a Test account prior to installing it in a Production account.

There are no special legal requirements involved in the use of the CM Tools' interface.

Capacity Management Tools Distribution Files

File Name	Туре	Description
KMPD2_0IG.PDF (documentation)	Binary	Installation Guide.
KMPD2_0UM.PDF (documentation)	Binary	User Manual.
KMPD2_0TM.PDF (documentation)	Binary	Technical Manual.
KMPD2_0.KID (release)	ASCII	KIDS Distribution. Required for all installations. Contains the Capacity Management Tools V. 2.0 server software:
		Global (^KMPD) and VA FileMan files.
		Server Routines.
		Capacity Management Tools Options.

Table 2-1: CM Tools-related software distribution files

VistA M Server Requirements

The following minimum software tools are required on your VistA M Server in order to install and use the Capacity Management Tools software:

■ Server Operating System

One of the following operating systems:

- Digital Standard M (DSM) for OpenVMS AXP V6.3-031 or greater
- InterSystems Caché for NT and OpenVMS

■ Fully Patched M Accounts

You should have both a development Test account and a Production account for the CM Tools software.

The account(s) must contain the *fully* patched versions of the following software (listed alphabetically):

 Computerized Patient Record System (CPRS) GUI V. 23.0 and Order Entry/Results Reporting (OE/RR) V. 3.0



The CM Tools software loads without CPRS GUI V. 23 and OE/RR V. 3.0; however, in order to start collecting timing data and enable the data collection and report-related CM Tools software options, Patch OR*3.0*209 must also be installed.

• Health Level Seven (HL7) V. 1.6



The CM Tools software loads without HL7 Patch #79 (i.e., HL*1.6*79); however, in order to start collecting HL7 statistics, HL7 Patch #79 must also be installed.

HL7 Patch #79 installs the \$\$CM^HLUCM API. The \$\$CM^HLUCM API contains code that enables the collection of HL7 information from the VistA environment.

- Kernel V. 8.0
- Kernel Toolkit V. 7.3
- MailMan V. 8.0
- VA FileMan V. 22.0



These software packages must be properly installed and *fully* patched prior to installing the CM Tools V. 2.0 software distribution. You can obtain all released VistA M server-side patches (including patch description and installation instructions) from the Patch module on FORUM or through normal procedures. Patches must be installed in published sequence.

Skills Needed for Installation

Skills required to perform the installation are listed below. Instructions for performing these functions are provided in vendor-supplied operating system manuals as well as VistA publications.



DSM for OpenVMS sites should refer to the most recent Computer Operations Management and Procedures for AXP Systems (COMPAS) manual. Please refer to the AXP Team's Web site at:

http://vaww.va.gov/custsvc/cssupp/axp/axphome.asp

Caché for NT and OpenVMS sites should refer to the AVANTI How-To Web site currently located at:

http://vaww.va.gov/custsvc/cssupp/avanti/How-to.HTM

You need to know how to do the following:

- Back up the system
- Copy files using commands of the host file system
- Run a Kernel Installation & Distribution System (KIDS) installation
- Switch User Class Identification (UCI) accounts
- Enable/Disable routine mapping and journaling
- Manage globals, including global placement, protection, and translation
- Run a system status and restore a job

3. VistA M Server Installation Instructions

The installation of Capacity Management Tools Version 2.0 only affects the CM Tools options. Therefore, this installation can be performed at any time of the day with minimal disruption. Aside from implementing any of the applicable items that are listed below, installation should not take longer than 10-15 minutes.

The instructions in this section are applicable for the Test/Production accounts in the DSM or Caché environments. Any unique instructions for a specific environment will be notated within the procedure.



All DSM for OpenVMS, Caché for Windows NT, or Caché for OpenVMS sites should install this software.

The Capacity Management Tools V. 2.0 software installation creates the ^KMPD global to store the CM HL7 DATA (#8973.1) and CP TIMING (#8973.2) files. This global will automatically be trimmed (records deleted) by the CM Tools Background Driver option to contain the maximum amount of data as prescribed by the CP parameters.



For more information on the CM Tools Background Driver option and CP parameters, please refer to Chapter 3, "CM Tools: Options," in the *Capacity Management Tools User Manual*.

This installation will automatically set up the CM Tools Background Driver [KMPD BACKGROUND DRIVER] option within the OPTION SCHEDULING file (#19.2). This option will be scheduled to run tomorrow at 1:30 a.m. with a reschedule frequency of every day (i.e., 1D).



All sites should ensure that the CM Tools Background Driver [KMPD BACKGROUND DRIVER] option is *not* currently running during the installation.

Version 2.0 Installation

1. DSM Sites: Review Your Mapped Set (required)



If you are a Caché site, skip to Step #2.

If any DSM beta test sites have mapped the KMPD* routines, they should be removed from the mapped set at this time.

2. Retrieve the KMPD2_0.KID File (required)

Obtain the **KMPD2_0.KID** file, which contains the Capacity Management Tools V. 2.0 software, from the Enterprise VistA Support (EVS) ANONYMOUS.SOFTWARE directory located at:

Albany OIFO <u>ftp.fo-albany.med.va.gov</u>
 Hines OIFO <u>ftp.fo-hines.med.va.gov</u>
 Salt Lake City OIFO <u>ftp.fo-slc.med.va.gov</u>

• VistA Download Site download.vista.med.va.gov

3. Load KMPD2_0.KID File (required)

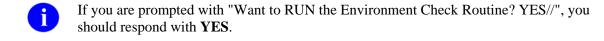
Use Kernel Installation & Distribution System (KIDS) to load the distribution. From the KIDS menu, select the Installation menu option. Invoke the Load a Distribution option to load the following software:

KMPD2_0.KID

The following is sample dialogue of a load of the CM Tools V. 2.0 software done at the Oakland OIFO:

```
Select Kernel Installation & Distribution System Option: Installation
          Load a Distribution
          Verify Checksums in Transport Global
   3
         Print Transport Global
         Compare Transport Global to Current System
         Backup a Transport Global
         Install Package(s)
         Restart Install of Package(s)
          Unload a Distribution
Select Installation Option: 1 <Enter> Load a Distribution
Enter a Host File: USR$:[ANONYMOUS]KMPD2_0.KID;1
KIDS Distribution saved on Mar 22, 2004@08:01:12
Comment: CAPACITY MANAGEMENT TOOLS 2.0
This Distribution contains Transport Globals for the following Package(s):
Build CAPACITY MANAGEMENT TOOLS 2.0 has been loaded before, here is when:
      CAPACITY MANAGEMENT TOOLS 2.0 Install Completed
                                      was loaded on Mar 16, 2004@09:15:33
OK to continue with Load? NO// YES
Distribution OK!
Want to Continue with Load? YES// <Enter>
Loading Distribution...
   CAPACITY MANAGEMENT TOOLS 2.0
Use INSTALL NAME: CAPACITY MANAGEMENT TOOLS 2.0 to install this Distribution.
```

Figure 3-1: Sample CM Tools V. 2.0 distribution load



4. Install Capacity Management Tools V. 2.0 Software (required)

Use KIDS to Install the CM Tools V. 2.0 software. Follow the KIDS installation prompts as you would any other KIDS installation. Specific prompts and suggested responses are notated below:

- a. Users may be on the system during installation of this patch and software. However, this software should be installed during off-hours, when a minimal number of users are on the system.
- b. You do not need to stop TaskMan.

- c. You may elect to use any of the following options within the KIDS Installation menu:
 - Verify Checksums in Transport Global—This option allows you to ensure the integrity of the routines that are in the transport global.
 - Print Transport Global.
 - Compare Transport Global to Current System—This option allows you to view all changes that will be made when the release is installed. It compares all components of the release (routines, DDs, templates, etc.).
 - Backup a Transport Global—This option creates a backup message of any routines exported with this release. It will *not* back up any other changes such as DDs or templates.
 - Install Package(s).
- d. When prompted for the INSTALL NAME, enter the following:

CAPACITY MANAGEMENT TOOLS 2.0

e. When prompted to rebuild menu trees:

```
Want KIDS to Rebuild Menu Trees Upon Completion of Install? YES//
```

You can respond with **NO** and not rebuild the menus until the normal scheduled menu rebuild takes place or **YES** to rebuild the menus immediately after the installation.

f. When prompted to inhibit logons:

```
Want KIDS to INHIBIT LOGONs during the install? YES//
```

You can respond with **NO**.

g. When prompted to disable options and protocols:

```
Want to DISABLE Scheduled Options, Menu Options, and Protocols? YES//
```

You can respond with **NO**.

h. If the Timing Collection background job is not turned on, you will get the following prompt:

```
I will start the Timing Collection background job when the install is complete? Yes// YES
```

You should respond with **YES**.

CM Tools V. 2.0 Software Installation Sample

The following is sample dialogue of an installation of the CM Tools V. 2.0 software done at the Oakland OIFO

```
Load a Distribution
   2
          Verify Checksums in Transport Global
   3
          Print Transport Global
         Compare Transport Global to Current System
   4
         Backup a Transport Global
   5
         Install Package(s)
         Restart Install of Package(s)
          Unload a Distribution
Select Installation Option: Install Package(s)
                      CAPACITY MANAGEMENT TOOLS 2.0 <Enter> Loaded from
Select INSTALL NAME:
Distribution 3/22/04@09:49:09
     => CAPACITY MANAGEMENT TOOLS 2.0 ;Created on Mar 22, 2004@08:01:12
This Distribution was loaded on Mar 22, 2004@09:49:09 with header of
   CAPACITY MANAGEMENT TOOLS 2.0 ;Created on Mar 22, 2004@08:01:12
   It consisted of the following Install(s):
CAPACITY MANAGEMENT TOOLS 2.0
Checking Install for Package CAPACITY MANAGEMENT TOOLS 2.0
Install Questions for CAPACITY MANAGEMENT TOOLS 2.0
Incoming Files:
   8972.1
            CP CODE EVALUATOR
Note: You already have the 'CP CODE EVALUATOR' File.
             CP PARAMETERS
   8973
Note: You already have the 'CP PARAMETERS' File.
            CM HL7 DATA
  8973.1
Note: You already have the 'CM HL7 DATA' File.
   8973.2
            CP TIMING
Note: You already have the 'CP TIMING' File.
Incoming Mail Groups:
Enter the Coordinator for Mail Group 'KMP-CAPMAN': KMPDUSER, ONE <Enter>
           COMPUTER SPECIALIST
Want KIDS to Rebuild Menu Trees Upon Completion of Install? YES// <Enter>
Want KIDS to INHIBIT LOGONs during the install? YES// NO
Want to DISABLE Scheduled Options, Menu Options, and Protocols? YES// NO
Enter the Device you want to print the Install messages.
You can queue the install by enter a 'Q' at the device prompt.
Enter a '^' to abort the install.
```

```
DEVICE: HOME// <Enter> Telnet terminal
  Install Started for CAPACITY MANAGEMENT TOOLS 2.0:
                        Mar 22, 2004@09:52:31
Build Distribution Date: Mar 22, 2004
  Installing Routines:
                      Mar 22, 2004@09:52:31
  Installing Data Dictionaries: ...
                        Mar 22, 2004@09:52:32
  Installing PACKAGE COMPONENTS:
  Installing FORM
  Installing MAIL GROUP
  Installing REMOTE PROCEDURE
  Installing OPTION
                        Mar 22, 2004@09:52:34
  Running Post-Install Routine: EN^KMPDPOST
  Updating Routine file...
  Updating KIDS files...
  CAPACITY MANAGEMENT TOOLS 2.0 Installed.
                       Mar 22, 2004@09:52:34
  Install Message sent #1486094
  Call MENU rebuild
Starting Menu Rebuild: Mar 22, 2004@09:52:36
Collecting primary menus in the New Person file...
                                Primary menus found in the New Person file
                                                                               # OF LAST LAST USERS USED BUILT
OPTION NAME
                       MENU TEXT
                                                   Rebuilding Menus
XMUSER MailMan Menu 67 03/22/04 03/21/04
EVE Systems Manager Menu 16 03/22/04 03/21/04
ISCSTAFF ISC OFFICE MENU OPTIONS 4 02/10/04 03/21/04
ISCUSER2 ISC OFFICE AUTOMATION/STA... 2 07/23/03 03/21/04
ISCMGR ISC MANAGER'S OPTION 6 03/18/04 03/21/04
A6A FIL MENU A Menu 1 03/16/04 03/21/04
ISCSTAFF2 Office Automation 5 07/16/03 03/21/04
ISCUSER3 ISC Menu 1 08/28/00 03/21/04
ISCUSER3 ISC Menu 1 08/28/00 03/21/04
DIZUSER VA FileMan (Limited) 1 10/14/03 03/21/04
PRCSCP OFFICIAL Control Point Official's ... 1 03/21/04
PRAPUSER Facility ADP User Menu 5 03/21/04
A6A 98EIR 1998 EIR Edit Menu 1 07/13/98 03/21/04
```

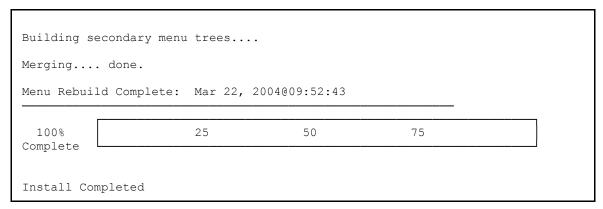


Figure 3-2: Sample CM Tools V. 2.0 installation

5. Post Installation Routine (required)

The following is an example of the informational message that you may receive while the post-installation routine is running:

```
Running Post-Install Routine: ^KMPDPOST

Queueing [KMPD BACKGROUND DRIVER] to run each day at 1:30am...

Complete!
```

Figure 3-3: Informational Message—Queueing background job

This informational message indicates that the post-installation routine is updating the schedule frequency of the KMPD BACKGROUND DRIVER background task to run nightly at 1:30 a.m.

6. DSM Sites: Delete Any Unmapped Routines (recommended)



If you are a Caché site, skip to Step #7.

If routines were unmapped as part of Step #2, they should be deleted from the mapped set once the installation has been run to completion.



The KMPD* namespaced routines are *not* recommended to be mapped.

7. Review Capacity Management Tools Settings (recommended)

Use the CP Tools Manager Menu [KMPD CM TOOLS MANAGER MENU] under the Capacity Planning menu [XTCM MAIN] located on the Operations Management menu [XUSITEMGR] on Kernel's Systems Manager Menu [Eve] to review CM HL7 data collection.

Invoke the CP Environment Check option [KMPD STATUS] and select either the HL7 or Timing report options to ensure that the CM Tools Background Driver [KMPD BACKGROUND DRIVER] is scheduled to run every day at 1:30 a.m. Review the other items in the status display for information regarding the CM HL7 DATA (#8973.1) and CP TIMING (#8973.2) files. Specifically:

- QUEUED TO RUN AT = 01:30 a.m. (or the appropriate time for your site)
- CM TOOLS BACKGROUND DRIVER = KMPD BACKGROUND DRIVER
- RESCHEDULING FREQUENCY = 1D
- TASK ID = TaskMan ID number is present
- QUEUED BY = An active user
- CM Tools routines displays no problems
- For more information on the CP Environment Check option [KMPD STATUS] and the CM Tools Background Driver [KMPD BACKGROUND DRIVER], please refer to "CM Tools Options" chapter in the *Capacity Management Tools User Manual*.

If the CM Tools Background Driver [KMPD BACKGROUND DRIVER] is not shown as being scheduled to run in the future, use the Schedule/Unschedule Options option [XUTM SCHEDULE] located under the Taskman Management menu [XUTM MGR] to schedule the KMPD BACKGROUND DRIVER option [KMPR BACKGROUND DRIVER] to run every day at 1:30 a.m.



Capacity Planning Services *strongly* recommends that the CM Tools Background Driver option [KMPD BACKGROUND DRIVER] be scheduled to run every day at 1:30 a.m., because this background driver is the main mechanism by which the following sub-globals are purged nightly:

- ^KMPD(8973.1)—CM HL7 DATA file (#8973.1): Records are purged as prescribed by the Purge HL7 Data After CP parameter, which is stored in the HL7 WEEKS TO KEEP DATA field (#3.11) in the CP PARAMETERS file (#8973). This parameter is edited via the Edit CP Parameters File option [KMPD PARAM EDIT].
- ^KMPD(8973.2)—CP TIMING file (#8973.2): Records are purged as
 prescribed by the Purge Timing Data After CP parameter, which is stored
 in the TIMING WEEKS TO KEEP DATA field (#4.11) in the CP PARAMETERS
 file (#8973). This parameter is edited via the Edit CP Parameters File option
 [KMPD PARAM EDIT].

Modification of the frequency and time may have adverse effects on the size of the temporary ^KMPD(8973.1) and ^KMPD(8973.2) sub-globals and on the number of entries within the CM HL7 DATA file (#8973.1) and CP TIMING (#8973.2) files.



For more information on the CP parameters, please refer to the "Edit CP Parameters File" topic in Chapter 3, "CM Tools: Options," in the *Capacity Management Tools User Manual*.

Version 2.0 Virgin Installation

1. Review Translation Table Settings (required)

Capacity Planning Services has been given the KMP* namespace for both routines and global(s). Therefore, you should review your translation table setting(s) to determine the proper placement for the KMP* global namespace.

Capacity Planning Services advises that sites should locate this global on a volume set that has a lesser overall level of activity. There are a couple of approaches by which the degree of activity can be ascertained:

- Monitor Global Growth—All sites can review CM's Top Globals Display option under the SAGG Trending menu options via FORUM. This option displays the top 10 globals in terms of growth over a selected time period. There is a very high correlation between the activity rate of a global and the corresponding rate of growth. This approach will yield many of the usual highly accessed globals. These highly accessed globals include: ^OR, ^TIU, ^XMB, ^ECX, ^LRO, ^PSB, ^PSRX, ^HL, ^LR, ^PRCA, and DIA.
- Monitor Global Accesses—DSM sites can utilize the *PMF utility on the cluster during several small (15 minutes) snapshots. The results will show global accesses per second for all globals across all volume sets. The benefit of this approach is that the results are not tied necessarily to global growth and will include other candidates with which you should avoid placement (e.g., DIC and ^DD).
- 2. Follow Steps #1-7 under "Version 2.0 Installation" (required)

VistA M Server Installation Instructions